

METHODS AND APPARATUS FOR TRUNCATION
COMPENSATION

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. provisional application number 60/416,072 filed October 4, 2002, which is hereby incorporated in its entirety.

BACKGROUND OF THE INVENTION

[0002] This invention relates generally to methods and apparatus for computed tomographic (CT) image reconstruction, and more particularly to methods and apparatus that provide for truncation compensation.

[0003] Under some scanning conditions, portions of a patient may extend beyond a region measured by a detector, which may lead to image artifacts and an incomplete representation of the imaged object. Some known methods have been published that address artifact reductions but not the imaging of the portion of the patient that is outside the field of view (FOV). However, it is desirable to image the portion of the patient that extends beyond the FOV such as is described in copending application serial number #####,#### titled Methods and Apparatus for Truncation Compensation, and filed on June 24, 2003 with attorney docket number 129993 (which is also hereby incorporated in its entirety), and claiming the benefit of provisional application serial number 60/416,072 filed October 4, 2002. Additionally, it is desirable to increase image quality of portions of the patient that extend beyond the FOV.

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BRIEF DESCRIPTION OF THE INVENTION

[0004] In one aspect, a method for determining whether a projection is truncated is provided. The method includes calculating a sum of all samples at each projection view of a scan of an object, determining a maximum value of the calculated